c: Redfield & Villa Rojas E-4,5 (1938) 1939 NV9 Tzeltal NV9

utensils pertaining to the other room include three tables of varying form and size. One of these, about 60 cm. high, is called *akhinsel*,[35] and serves as a support for the metate (*chá*). Another smaller table (*matzamalté*) has three legs and is circular in form, it is used in making tortillas. The third table (*ucbalté*), also small but quadrangular, is used in serving food. Three benches of hollow logs (*tzantel*) and small chairs (*taburetes*) serve as seats. Deep baskets and gasoline boxes are used for holding clothes. Hanging from the roof is always to be seen a disk made of vines (*likin-nab*). This is used to keep comestibles from the rats. The other implements are the griddle, pots, and other vessels of clay, and calabashes and gourds in various forms and dimensions.

Besides the fowl pen (*na-mut*) and the pigpen (*na-chitán*) it is common to see near the house the temazcal, or steam bath (*pus*). It is made of clay and irregularly shaped stones; it is rectangular with a small door in front and a ventilator in the rear. It is usual to cover it with a small shelter of straw. The use of the temazcal is common in the highlands. It is almost not to be found from Ococingo northward.

Each village has its own costume; however, local variations conform to a certain pattern which changes according to the altitudes and climate. Thus, in the region of Los Altos the usual pattern of dress is the following: for men, short cotton trousers (*uex*)[36] and cotton shirt (*kú*) reaching to the knees, a sash (*chukichút*)[37] of wool or cotton and in most cases red in color, a poncho (*tzotz*) made of wool and in most cases dark grey in color, a handkerchief (*chuhkil*), a straw hat (*pixol*), and leather sandals (*xanab*); women wear a white blouse (*kú*) and a blue shirt (*tzequel*), both made either of wool or of cotton, and a red woolen sash (*chukichut*). Some women in going out-of-doors add a woolen *rebozo*. Women use also a cotton cloth (*tzitz-cal*) to carry small children. They wear no footgear.

In the tierra caliente the dress of the women is almost the same except that it is cleaner. On the other hand that of the men, although equally clean, presents marked differences: the trousers are longer and the shirt shorter, coming to resemble an open blouse or *guayabera*. The sash and the poncho cease to be indispensable garments. It is in this region that there is most use of trousers and shirt in European style.

In Tenejapa, Starr found that the Indians had Tzeltal surnames. He says, "We feel sure that these are *not* nicknames, but the old family names still preserved."[38] He does not give examples, and says nothing about any relation between these name-groups and marriage. Blom and LaFarge make no note of such names, and say "there are no formal restrictions on marriage."[39]

Villa found Indian surnames present in Chanal, Tenejapa, Cancuc, and Oxchuc, and was told that marriage is not allowed, or is at least strongly discouraged, between persons of the same Indian surname. In Chanal an informant indicated that such

[35] The names of these objects vary from one village to another; those which are described here were obtained in Chanal.

[36] The names of some of these garments vary likewise from one village to another; here Villa gives names used in Chanal.

[37] Starr, 1908, p. 75.

[38] Blom and LaFarge, 1927, 2:359.

boiled beans; other tamales (*petul*), which are made from dough and whole beans; and finally, still more atole. The atole is served not in individual *jícaras* but in two or three large ones (*batzil-booch*), which are passed from person to person. The same is done with the other foods; they are served in one or two large pots (*mucul pulato*) out of which everyone serves himself. This banquet is given only on the first day of the planting; if other days are required, the milpero himself does the planting.

Since weeds grow rapidly during the rain season, the milpa must be hoed twice before it reaches maturity. For this the luk or coa is used and also the hoe (*asron*), the same one used to break the soil before planting. The first weeding is done in June, the second between July and August. Women help their husbands in this chore and sometimes do it entirely themselves, since the men are in the habit of leaving for Tapachula to work as peons on the coffee plantations.

Also in the milpa beans of several varieties are planted: *chuil-chenek* (or *ibes*, according to the Ladinos); *botil*, a large common bean; *xakil-chenek* or *frijol de vara*; and the *x-luumil-chenek* or *frijol de la tierra*, thus called because it is a creeping plant.

Chile is planted on a separate lot, 15–20 m. square. The planting is done during the first weeks of March, in alternate years so that it will not coincide with the year when the people of Cancuc plant cotton. Chile planted by the people of Oxchuc is *dzajal-ik* or red chile.

Toward the end of August, the first fruits are ready (*unimajam* or *jilote*, according to Ladinos). These are received with great joy by the families which are by then lacking food. From each plant, which provides two or three *jilotes*, the farthest down is picked to let the other two grow bigger. These jilotes are boiled without salt and are eaten whole, including the husks.

[CP 201-A]

412 (*eché*), hoe (*asron*), machete (*machit*), coa (*luk*), and digging stick (*avutel*). In a 243 few towns (Amatenango), where lands are [409] flat, the plow is made of wood and pulled by oxen but only for wheat farming. During [415] corn planting, the seed is carried by the [824] planter in a *morral* hung from the shoulder, [237] in a gourd with a large spout, or in containers made of armadillo shells. The harvested crops are placed in deep baskets, made of reed-grass, or in big pita (*chojak*) [412] net bags. The ear of corn is cleared of its [237] husk by a sharp bone or a small deer horn.

322 The axe, machete, and knife are used in
412 wood working, which is very rudimentary, though handsaw and hammer have a place. With these tools the Indians make doors, tables, seats, small benches, shelves. Blom [534] and LaFarge (1926–27, 2:351) add that the Tzeltal near Ocosingo also make violins of a shape similar to the European type, but they have no resonance and poor tone. They also manufacture pipes and combs roughly [463] finished. No village of this group has specialists in carpentry to compare with the Chamulas (Tzotzil-speaking), who supply furniture at low cost to San Cristobal de las Casas and other places of the area.

324 Stone carving requires a pickaxe with
412 one end very sharp, the other very flat to serve as a hammer, and a short wooden handle. This is the tool used in Tenejapa for making metates. These metates have three legs, but Blom and LaFarge (1926–27, 2:338) mention metates without legs (Ocosingo municipio) which are made of volcanic stone found along the San Martin River. According to the Tzeltal of Oxchuc, the name of the metate is *chá*, its handle *kab-chá*.

412 An iron bar to break the ground, an axe, and a machete are the tools for building huts, chickencoops, sweat houses, and other small structures.

283 Another tool, used in the making of pita
413 rope, is *karet*, which probably comes from the Spanish *carreta*. It consists of a wooden disc fixed to a tree trunk that is nailed to

[P.206-A]

283 413 the ground. This disc has two hooks to which the fiber is knotted; when the disc is turned by a crank, it braids the fibers into rope. A thick board, smoothed by a metal knife (manufactured by the Indians from iron pieces bought in the city), is used to scrape the pita and remove the fiber.

407 [177] The most complex machine that the Tzeltal own and build is the wooden cane press, which was imported by the Spaniards to grind sugarcane (fig. 6). This machine is operated by two men, who move the rollers by a handle (*kabal-té*) at each end of the machine. The juice pressed out by the rollers drops into fluted containers made of pieces of banana tree, and finally into a pot. This juice is used in the preparation of an alcoholic beverage, *chicha* (*chi-ja*, 'sweet water'), and for panela. Chicha is prepared by fermenting this juice by bran, corn, or wheat, in a special container (*canoja*) made from a fluted tree trunk. The bran or other fermenting agent is *smé-chi-já* ('mother of the chicha'). Some communities (Tenejapa, Cancuc, Oxchuc) have greater preference for this beverage than other Tzeltal groups.

[415] [415] [184]

224 411 [412] A gun has become very common in hunting. Sometimes (Oxchuc and Tenejapa) rabbits are taken by striking them with a coa, after cornering them with the aid of dogs. Blom and LaFarge (1926–27, 2:352) state that the Tzeltal of the lowlands usually hunt wild boar with long wooden spears with fire-hardened or metal points. Traps protect the milpa as well as snaring game.

41 Cooking utensils are mainly indigenous. The usual set consists of clay containers of varying size and shape, jícaras, baskets, wooden spoons, a comal, a metate, hooks, and wooden tripods for hanging items over the fire. In the last few years metal pots, dishes, frying pans, boiling pans, and especially handy *nixtamal* mills (which are gradually displacing the grinding stone) have been introduced. Other items that come from the city are flashlights, small kerosene lamps, watches, scissors, and (infrequently) battery radios.

177 404 415 177 207 405 412 416

[P 206-B]

342 lages of the lowlands where the houses have
[354] small windows, which improve ventilation
and illumination slightly. In places like
342 184 Chanal, where there is abundant lumber,
the sides of the houses are built with wood-
en boards set vertically. The largest and
best-built houses are in Tenejapa center.

Generally, the hut is divided into two rooms: the front is parlor and kitchen, the rear is bedroom. In Bachajon the rear room serves as bedroom and kitchen, the front room for sewing and grinding and the re-
[574] ception of visitors. In Amatenango del Valle the front of the house is open and
[323] used as a porch for visits. Ceramic work
[251] is also performed here. In one room of the house a bin of wood or reeds stores corn.
[343] Sometimes, small structures which serve as granaries are built inside the hut.

343 515 Among the auxiliary structures outside is the temascal (*pus*) used for steam baths. Not every hut has a *pus* since one is enough to attend the needs of several neighboring families. The *pus* is a small room 1.5 m. high by 2 m. on each side, built of stones and clay. The roof is flat. Inside a hollow forms a hearth for heating stones. Water thrown on these red-hot stones produces the necessary steam. On the floor are boards on which people lie while taking the bath.
[184] Among the Tzeltal and Tzotzil the *pus* is
[757] not only for cleanliness but also for the cure
[846] of certain diseases and to strengthen women after childbirth. Sweat baths are more commonly taken in Tierra Fria than in Tierra Caliente.

417 The other structures near the hut are the chickencoop and the hogpen.

352 Furniture is limited to essential items. In the kitchen are the three hearth stones, the comal (*samet*), the grinding stone (*chá*), a bench or strong table to hold the metate (*ah-ken*), one or two small tables (*matz-malté* or *vebalté*) 25–39 cm. high and 30–40 cm. in diameter, and small benches 15–20 cm. high made of scooped-out tree trunks
• 415 (*tzanté*). Kitchen equipment includes earthenware (pans, pitchers, and jars) and

[P. 207-B]

4: Villa Rojas E-4.5 (1938-1944) 1969
NV9 Tzeltal NV9

containers made of jícara (*boch*) or tecomate (*tzu*). In the bedroom is a bed (*uaybal*) made of boards placed on four forked poles, usually with a sleeping mat on it. Only the very poor sleep on mats on the floor. Small chairs, wooden chests for clothes, baskets of all shapes and sizes, pita bags and nets, shelves made of wood ribs, and pegs for hanging clothes are scattered around the hut without order.

The most important article is the altar with the family cross. Its construction varies in different areas: it may be a plain small table made of tree trunks or better material. The altar is generally ornamented with pine needles. Occasionally, the figure of a saint is placed by the cross.

Clothing and Ornaments

Each community has its own style of clothing, which gives a sense of unity to its members and permits the observer to identify easily the groups during fiestas or market days. This variety applies only to a few items of clothing, which is basically the same for the entire region. Men's costume consists of short pants (*uesh*) and a long shirt (*nátil-kú*) which reaches the knee, both made of cloth that women weave; a red sash or belt (*chuj-chut*) of cotton, 10–15 cm. wide by 1.5 m. long; a palm hat (*pishol*); and leather sandals (*shanabil*). Residents of cold areas wear a woolen chamarra which is manufactured by the Chamulas. Women's costume consists of a skirt made of wool (*tzek*) or blue thick cloth, made in one piece and wrapped around the body with two pleats in front; it is belted at the waist by a red wool sash, which the Chamulas manufacture. Occasionally, they wear a wool rebozo. They tie their hair with a red woolen ribbon (*malal*) and wear earrings (*yulel-chikinil*) and glass necklaces (*ual*) bought in the city. Women always go barefoot, even during long trips. When outdoors they cover their heads with a cloth or wool fabric.

Each municipio has made of these clothes

[P.208-A]

804 *Shucubil* ("codo"): Distance from the elbow to the end of the middle finger extended.
Jaub ("braza" or "brazada"): Distance between the ends of both extended arms.
Yankabal (equivalent to the meter): Distance from the armpit to the extended middle finger of the opposite hand.

[484] The "legua" is also used and is equivalent to the distance a man can walk during one hour (approximately 5 km.).

Of square measures used for the milpa, the most common is the *tarea* (equivalent to a square of 8 jaubs). This is equivalent to a square of 16 m., which is very close to the mecate used by the Yucatec Maya.

The standard most often used for measuring maize or beans is the *almud*, which among the Tzeltal of Cancuc, Oxchuc, and Tenejapa, is equivalent to 4 *quartillas* (each quartilla is equivalent to 8 large *borcelanas*). The borcelana is an earthen cup or pot, which can be either small or large. The large one is equivalent to ½ kg. of maize, the small one to ¼ kg. of maize. The borcelana is used to measure chile.

[415]

ECONOMICS

241 *Division of Labor and Specialization*

462 Care of the milpa is men's work, but sometimes women help with light tasks such as weeding or harvesting. Seeding does not require great effort, but it is considered a job for men exclusively. Women may participate in chile seeding—but in the planting only; the holes in the ground can be made only by men, who use a *macana* or planting stick. Cutting and carrying firewood are tasks for men, but women may perform them when men cannot. Women can handle an axe or machete skillfully. Fetching water, from river or fountain, is work for women. It is considered inappropriate and ridiculous that a man carry a cantaro on the hip. Laundry and all kitchen duties are performed by women, as well as spinning, knitting, sewing, embroidering, and making of earthenware. Manufacture

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[P 209-A]

[Text continues on p. 210-B]

4 Villa Rojas E-4,5 (1938-1944) 1969 NV9 Tzeltal NV9

Tenejapa

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FIG. 5—TENEJAPA GROUP WITH VESSELS CONTAINING CHICHA. (Copyright, Gertrude Duby.)

[P. 214-A]

5: Blom & LaFarge A,E-4,5 (1925) 1927 NV9 Tzeltal NV9
Bachajón

stone, *ton-al-ha'*, ("water stone"). The other, *skaltca-muk* ("big metate") was made of an igneous stone called *hayáltcak*, brought from San Martín. The *manos*, or smaller stones used for grinding on these, were called *miscabtca* (fig. 290). To the left, opposite this table, was the fire, *kak'*, built of two broken ollas and two small rocks, placed so that the logs could be laid star-fashion between them, and close enough together to support the tortilla griddle or an olla (fig. 291). Outside the house was another fire, with only three stones, on which was drying a basket full of *pinole*, *tcilim*, a fruit which is mixed with cacao in a form of chocolate. Over the house fireplace racks, *baxtet*, were placed at the level of the eaves across the corner, and along the wall to the middle post, that things hung up there might be protected by the smoke from insects. All these things are indicated in the plan.

FIG. 290—Table with Metates.

A hammock, *aktci*, which we understood was not of native make, hung across the middle of the house. Two woven mats, *pOp*, the Spanish *petate*, lay on the beds. Beside this, the beds, and the table, the only thing that could properly be called furniture was a three-legged stool about 80 centimeters high, *matsumte*. Two mats of pounded bark, or tapa, *bat-te* ("bark tree"), or *bat manil tcahan*, were rolled up in a corner. First comers got the hammock to lie in, others sat on the low "squatting seats," *tsamate*, of which there were three, made each of half a log, peeled, and partially flattened on top, with a handle on one end.

The tortilla griddle was a flat, dish-like pottery affair, about 40 centimeters in diameter. There were five ollas, *ŏcom*, with plain

5: Blom & LaFarge A,E-4,5 (1925) 1927 NV9 Tzeltal NV9
Bachajón

necks and round bottoms. Two were full of corn and lime for tortillas, just off the fire. A big Tenango jar, *k'ip*, of the kind to be described at that place, was used for water.

A pottery dish, about 7 centimeters across, *tsets*, is commonly offered to guests to wash their hands. It is placed on a pottery stand of an hour-glass shape, about 15 centimeters high, *awaliko* (see fig. 299). The ordinary plates and general vessels are flat gourd dishes, *qai'*, about 20 centimeters across. Gourds as well were used for a dipper, *tuts*, and a water-jar, *tsux*. Two nets hung from the rack. There were three small baskets, *tutemotc*, and four big ones, *mukulmotc*. Hanging on the wall were a pair of the basket-work sandals mentioned before, and selected ears of corn for seed. The wife's textile outfit, more fully described later, consisted of a spindle, *pětět*,

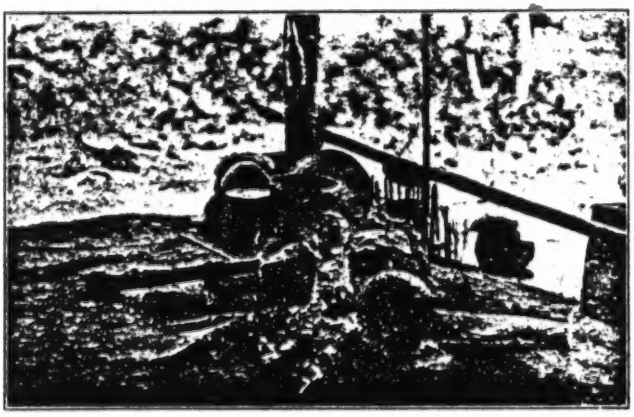

FIG. 291—Bachajon Fireplace.

with clay whorl, spun in a gourd bowl, *tsima*, cotton, *t'umin*, hanging in leaves, and the loom itself, *holěl*. A sling, made of a forked stick and rubber band with a leather piece to take the clay pellet, *finmutc*, belonged to the small boy. Bananas were drying on the rack. With them were laid, or hanging in packages of leaves, beeswax, *tcavek*, blocks, 20 x 20 x 2 centimeters, for trade purposes, used for making candles, a lump of hard red clay, *baq lum* ("bitter earth"), for washing the hair, and sometimes also eaten, a package of brown loaf sugar, salt, *atsam*, traded down from the Zotzil country, several packages of pimiento pepper, and serpent fat, *junto tcan*, for rubbing on the chest to cure coughs. Under the table was a basket of coarse, blackish-gray clay for making pottery, *tcavek lum* ("beeswax earth"). Five wild boars' jaws and an armadillo's tail

5: Blom & LaFarge A,E-4,5 (1925) 1927 NV9 Tzeltal NV9
Bachajón

Five wild boars' jaws and an armadillo's tail hung in the eaves so that the dogs might see them, to prevent their going away or losing heart. A swizzle stick, *mahas*, about 40 centimeters long, was used for stirring cocoa. It is made by cutting a twig above a joint with four branches. Two rat traps, *yakul*, just outside the hut, were exact models of the larger deadfalls used for jaguars (see fig. 308).

Add to this the clothes on the inhabitants backs, and the man's machete, and you will have a complete list of the worldly possessions, large and small, of a Bachajon family—altogether some forty-four different kinds of things. We assembled as many together as possible, arranging them as for a feast, and placed in the middle the small son of the house, and a little monkey of a boy, Miguel, who accompanied us to run errands (fig. 292).

Fig. 292—Bachajon boy guests.

If mud-plastered walls are added to this description, you have a typical Ocosingo Valley house. Change the grass roof to palm, it is the kind to be seen in the jungle country.

At Muxculja (*muckul ha*, "Covered Water"), in the jungle, our Indians built us a trail shelter or hut of the type called in Spanish *champa*, and in Tzeltal *tutna'*, "small house." This enabled us to note the manner of building the frame-work and laying on the roof. The kind of *champa* built for us, with an A-roof and gable ends, is called *gwakac na'*, "cow house"; the more common type built by the Indians when alone, a simple lean-to, is called *lestee-pat* (should be *lestee-pahk?*) "only one wall."

Our shelter being more than usually pretentious, we could observe most of the steps in building a true house, although, of course, the form here was different and the construction much lighter (figs. 293-294). It was three meters, fifty-one centimeters long by three meters wide, two meters high at the ridge-pole, one at the eaves. It had no walls. From the construction of the outline of the frame to the completed thatching it took fifty minutes for four men, later only two, working without haste.

5: Blom & LaFarge A,E-4,5 (1925) 1927 NV9 Tzeltal NV9
Tenango

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FIG. 111—Tenango, Chia. Street Scene.

5: Blom & LaFarge A,E-4,5 (1925) 1927 NV9 Tzeltal NV9
Tenango

286 and often have no fringe. We were told that it was impossible to
123 see a woman weaving at that time, but by persistent stalking the
126 writer finally managed to locate a girl at work, whom he observed
286 and sketched from behind a bush. The women here were so consistently shy that no doubt she would have rolled up her loom, which was of just the same type as the one seen at Sivacá, and fled into the house had she known she was observed. Our procession through this very pretty village, too, was a serious affair—distinguished strangers being shown around town by the mayor—and had none of the cheerful joking and general *bonhommie* that produced such friendliness and good results at Sivacá.

241 Something more should be said about the agriculture here. Ordinarily, Indians go out to choose their own land in the bush and

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FIG. 319—Tenango, Chis. La Farge drawing pottery.

241 plant it with little cultivation, placing the corn close together. Here each family has its land assigned to it by the council. As the same field must be planted year after year, the hills of corn are widely spaced, and the ground is turned over as deeply as possible by means
[417] of heavy hoes, *ak'en*, purchased in San Cristóbal. As was said, everything is fenced as much as possible. When some of our pack animals got loose in a field, the excitement was intense. In the yards of the houses they raise corn, beans, and a plant related to tobacco. This
824 plant grows nearly as tall as a man. The leaf is rubbed on their legs to cure fatigue. It is carried with lime in a small gourd and offered and accepted for chewing with much the same bowing and formalities as obtained among our ancestors when offering snuff.

5: Blom & LaFarge A,E-4,5 (1925) 1927 NV9 Tzeltal NV9
Cancuc

that he was invited into her house, presumably to take shelter from the evening rain that was beginning to fall. The house, of which he sketched a hurried plan (fig. 324) was more rectangular than is usual, the prevailing type being square with a pyramidal roof. He entered through a low doorway, closed with a wooden door on leather hinges. Although the ridge of the roof was high, the many cross poles reaching from the top of one wall to the other made it necessary to stoop. The writer squatted by the door, facing the fire, which smoked merrily in the closed room. The old woman immediately set to shaping a pile of tortillas for baking. Along either wall was a well-made bench, decorated with notches along the top and geometric designs on the back, similar to the benches on the Cabildo porch (fig. 325). These and a sturdy table that was stored on top of the stringers were said to be purely local products. By the door stood a big jar, a full meter in height, crude and undecorated (fig. 326). There was the usual collection of ollas and gourds, and one other new form, an open-mouthed pot about eight centimeters high and as many in diameter, flat bottomed, with a handle on one side, called *hütc* (fig. 327). In the thick smoke, it was hard to see anything. I was interested to note that my hostess' eyes watered nearly as much as my own. In the darker end of the house I could make out corn stacked neatly along one wall, and a partition that presumably hid the beds. For a while the woman answered the few questions that I could make her understand by means of signs, my half-a-dozen words of Tzeltal,

Fig. 323—Cancuc, Chis. Drinking scaffold.

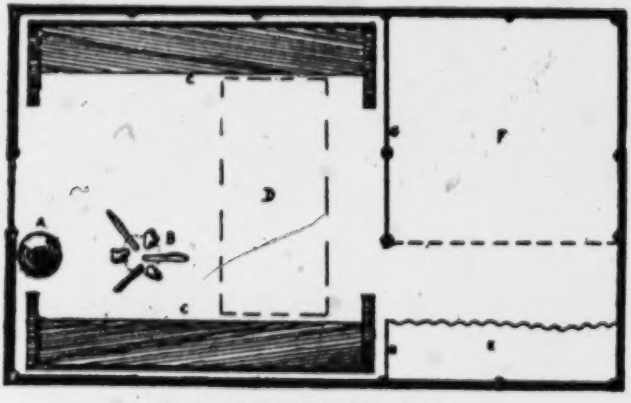

Fig. 324—Cancuc, Chis. Plan of House.

5: Blom & LaFarge A,E-4,5 (1925) 1927 NV9 Tzeltal NV9
Cancuc

and her three words of Spanish. Then she grew hostile, answering everything with a plaintive *"Ma snaa,"* "I don't know." This went on for two or three minutes, then suddenly she flung open the door and waved me out with no uncertain gesture, saying something about the "Presidente Municipal," and the "Secretario." By this time it was pouring cats and dogs, but there was nothing to do save run for it.

Cancuc is not noted for any product. There are about the same arts and industries as at other towns, but the only ones that amount to anything like a specialty are netmaking and whittling combs. The combs are better and more neatly made than those of the Bachajon, and with a selection of the wood for grain that often produces very pretty combinations. The nets are made by the men, who

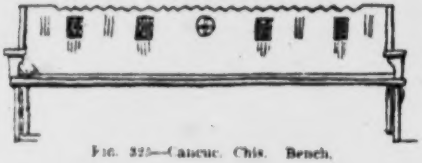

Fig. 325—Cancuc. Chis. Bench.

Fig. 327. Cancuc, Chis. Pottery. Hilte. (8 c.m. high).

Fig. 326—Cancuc, Chis. Tall Jar. (1 m. high).

go about rolling the twine or knitting as they walk. The process was described in the last chapter.

Being on the main highway, the government maintains a long shed, like a wagon-shed, thatched with leaves and grass, which is at the disposal of travelers. This relieves the Maestro of duties of entertainment. Towards nightfall, various groups came into camp here, a family of Mexicans, with a big fire, and goods piled high, two traders with their packs, some Chamulas, fine-looking men dressed in white wool tunics, with flowing cotton kerchiefs round their heads, and a couple of Tenejapeños with nets full of apples. The Chamulas, who are remarkably progressive Indians, had come in with a string of mules. After dark, the line of fires in the divisions of the shed, the talk, the fire-lit figures in their varied costumes, with the Church and houses rising on the terraced hill behind made as picturesque and charming a scene as one could possibly imagine.

7: Nash E-5 (1957-1967) 1970 NV9 Tzeltal NV9
Amatenango del Valle

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of witchcraft. Today probably 95 percent of the new roofs are made of tile. Often the old roofs cannot be replaced with tile because the rafters were not built to support them. One result of the change has been the dependence on a carpenter to construct the gables, since they have to be lined up more accurately than they do with thatch or palm roofs.

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House lots in the town center are preferred to those on the margins. As residents of house sites on the ejido lands at the margins of the town acquire wealth, one of the first things they try to do is acquire a house closer to the plaza. These lots are smaller, averaging about 500 square meters, while those farther out average 900 square meters. In a sample measurement of 100 house lots, the size ranged from 180 to 1,440 square meters, and the average size was 77 square meters. Considering the advantages of a large lot in growing chile fruits and corn, the preference for smaller central lots reveals the strong prestige factor influencing choice.

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House furnishings include both purchased and homemade items. Sleeping accommodations consist of wooden bedboards, either nailed on a frame or simply laid on blocks and covered with a straw mat. Woolen blankets from Comitán are sold locally at a price of 24 pesos or for 20 pesos in San Cristóbal and 18 pesos in Comitán. Most households own two or three wooden benches which line the walls of the porch and are made locally. Small chairs are purchased from Chamula carpenters at a cost of 2 to 4 pesos, as well as a small table costing about 4. A higher table is provided for the saints' pictures and candle holders, incense burner, and flower vases or tin cans. Hooks are fashioned from the crotch of trees and suspended on the house posts. Wooden boxes are bought from Ladino carpenters in San Cristóbal at a cost of 10 to 20 pesos depending on size and workmanship and are used to store clothing. In addition to the homemade water holders, water carriers, comales, strainers, and bowls, handmade glazed ware from San Cristóbal, factory-made porcelain dishes, metal cooking pots, knives, and spoons are purchased. Gourds provide serving ware for ceremonial occasions. Stone grinding platforms and rollers are purchased in San Cristóbal for about 10 pesos. Two new items have become increasingly popular in the past five years: a metal grinding machine for corn, hand operated and costing from 40 to 60 pesos depending on the size and quality, and a hinged press for tortillas, costing 15 pesos if made

7: Nash E-5 (1957-1967) 1970 NV9 Tzeltal NV9
Amatenango del Valle

of metal and 10 pesos if made of wood. These are lined with waxed paper which the local storekeeper cuts from cracker-box wrappers and sells for 5 cents each.

Electricity, first used in the cooperative store and later in the liquor shops, is now being installed in houses. 83 families had electricity installed in their homes by 1967. Street lights have been in operation since 1966, although the first attempt to install them was blocked by residents on the streets to be lighted who did not want to pay the tax of 1 peso per month per household to meet the cost to the community of 75 pesos a month. Most people have a flashlight, and lighting in the house is provided by pitch pine or by small kerosene lamps. Candles are used only in ceremonies.

The inventory of items sold in the cooperative store in town includes the most frequently purchased items of consumption. Hardward includes buckets, hoes, kerosene lamps, batteries, Gillette blades, shotgun bullets, canned goods such as sardines, chiles, and powdered milk. Packaged foods include rice, sugar, salt, oatmeal, cornstarch, flour, coffee, biscuits, cookies, gum, and candy. Beer is sold along with soft drinks and cigarettes. Household supplies include candles, soap, D.D.T. powder, thread, matches, and kerosene. Medicines dispensed most frequently include sulphur pills, aralin, Desenfriol, Alka-Seltzer, and Sonrisal. Yard goods for shawls, children's wraps, and men's clothing are sold along with manufactured shirts, blouses for girls, and rubber capes. Eggs as well as money are taken in payment and then sold. Except for one can of Chocomilk, which sat on the shelves for a year, all of the items are in constant demand, and provide an index to the level of living and dependency on external markets.

The preferences in changing consumption are limited by communal standards of what is appropriate. I once asked a man who was acquiring more than the usual income by brokerage activities what he would buy with more money. He replied, "I would get more land and cattle." I interrupted to ask what he would do to improve his standard of living. "I wouldn't get better clothing—what would I need that for? I would get a house built with good materials like this [the government-built clinic] with a cement floor. But I couldn't get it now because of envy. When my children grow up, they [the neighbors] will see them working and maybe

7: Nash E-5 (1957-1967) 1970 NV9 Tzeltal NV9
Amatenango del Valle

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[053] I can get one then. Last year I bought a transistor radio for nine hundred and ninety pesos. My wife said she would leave me if I got it because all the children would get sick. But I got it anyway and no one was sick. I am stronger than my enemies."

Innovation on the consumption level is adding a stimulus to innovation in economic activities. The successful innovator must invent a rationale for his improved standards of living and then prove that he can survive the possible evil consequences of envy. The process of adoption is one of a shift in the incidence of choices made in the direction of improving levels of living. The new is often incorporated with the old rather than replacing it. For example, after the rough preparation has been done with the mill, [252] grinding stones are used for the final grinding of corn to get the dough into the preferred consistency for making tortillas. Tin plates are used [415] along with crockery and gourds. Some items are linked in change: for example, tailored pants are worn only with buttoned shirts and belts and [291] with zippered jackets. The old forms are continued in a ceremonial context: kotonču is preferred when a man undertakes an official role, and [096] gourds are preferred to any other container for ceremonial foods.[415] The technology of production lags behind the changes in consumption that have increased the need for greater income—agricultural tools have not been modified since the colonial period when the wooden plow, metal hoe, machete, and plow used with draft animals were added. Changes in consumption needs rather than in productive technology are expanding the economic horizons of the Indians.

Choices and Strategies in Agricultural Production

241 In agricultural and pottery production, decision-making concerning the use of land and labor resources is controlled not only by a traditional technology but more importantly by a given state of cognitive orientations that determines, in Goodenough's words (1966:54), "what states of affairs they have learned to discern, what they believe to be the relations between them, and what they understand to be the processes by which one state can be transformed into another." Agriculturalists have a fine perception

7: Nash E-5 (1957-1967) 1970 NV9 Tzeltal NV9
Amatenango del Valle

The truck is the focus of the desire for self-improvement, for fighting the Ladino monopoly of the road, for the antagonisms and factional strife and conflict within the community. When they bought the truck, the Indians hired a Ladino in the neighboring town as chauffeur. One of the conditions of his employment was that he would teach his Indian assistant to drive. The Ladino tried to avoid doing this since he knew it would be the end of his job. But the Indian assistant learned by observation and is now operating the truck with an Indian assistant.

Accounts of the cost and profit of the truck operation indicated a running loss. A new tarpaulin cost 1,200 pesos; there were repairs and bribes to the highway patrol. But the truck was kept in operation because the major shareholders were impressed with the power it gave them. "They [their enemies, the members of the other co-operative owned by the Ladino along with twenty members of the community] are afraid of us because of the truck," one said, and added that it was better than having a *swayohel*, the animal spirit that gives power to the curers. At the time of my last visit in 1967 the truck was making a profit. The owners were thinking of selling it and replacing it with a five-ton model.

Structural realignment has been most marked in the organization of the truck-owning cooperatives. Membership cuts across the dual division for both of the truck-owning cooperatives. The cooperative is the most important factor in local political elections (Chapter 9). The truck has become both the symbol of power and the basis for the contest for power between the factions within the community.

Contraband liquor. The number of distillers has grown in the last ten years from five to forty. The distillation process was learned by Indians from Ladinos in neighboring towns fifteen years ago. There has been no local innovation in the basic process, but a new item, used in distillation, has been introduced into pottery production, a funnel decorated in the traditional manner of the water jars and other vessels. The capital investment in the equipment for operating the still is put up by individuals or partnerships of relatives. The still is rented to people who have charge of the celebration for a saint's day, or who are involved in courtship.

Private enterprise is the favored form of organization of the distillers be-

[P.198-E]

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Plate 6. Woman scraping a cantero that has been sun-dried in the porch of her home. Behind her is an altar with pictures of the saints. Photograph by Marcey Jacobson.[1]

1/1 (correction, this should read "photograph by Marcey Jacobson"..Analyst)

7: Nash E-5 (1957-1967) 1970 NV9 Tzeltal NV9
Amatenango del Valle

[P.198-F]

Plate 7. Types of pottery produced:

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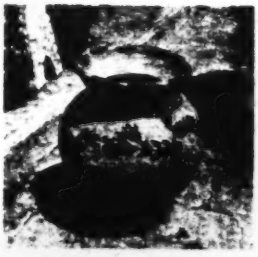
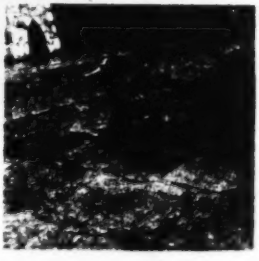
a decorated water pitcher



b water storage jar

c bowl

d water-carrying jar



e toy: man astride donkey

f flower holder shaped in form of duck

g candle holder

h vase on an ashtray, pedestal with three frogs

Photographs by Jean Simmons.

7: Nash E-5 (1957-1967) 1970

NV9 Tzeltal NV9
Amatenango del Valle

[F198G7]

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Plate 8. Women of a household and their helpers grinding corn and making tortillas with a press in preparation for a house ceremony. They are all dressed in the traditional costume. Most of such food preparation is done inside the house except at the time of large festivals. Photograph by Marcey Jacobson.

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Plate 9. Curer sitting next to the center post where he has just arranged the candles and branches of spring bushes in preparation for the house fiesta. The basket contains the protective crosses, bound with palm fronds, which he will nail on the house posts. The basin contains springwater, and the gourd in the foreground contains the powdered medicines which will be added to the water and drunk. Photograph by Marcey Jacobson.

351 592 571 When the people in two adjacent sitios have close social ties, they open an interior gate in the common fence, connecting the two yards. June Nash has noticed that if any disagreement [578] occurs between the people residing in the two contiguous sitios, the interior gates are barricaded even more strongly than the remainder of the fence, symbolically severing social communication (Nash, J: 1959).

351 592 Inside the sitios, there are several areas of activity [343] (see Fig. 10): the front yard (ti?naie) where animals are tied [342] when brought to the sitio, where corn is put to dry, etc., and where there are buildings (hna) such as the cook-house and others [241] which serve as sleeping quarters. The back yard is the place where things are stored and where a small garden is cultivated. [415] There are other spots, such as the place for the water jugs, the [252] place for washing the mixtamal (corn mesh used for making tortillas), [343] the sweat bath, etc.

342 The buildings themselves are mainly wattle and daub with thatch or palm roofs in the traditional Mayan pattern. There is, nevertheless, some variation in the use of cane, shingles and planks for walls, or tile roofs, which indicates a desire to imitate ladino ways rather than the wealth of the household. The houses have small porches which serve as "living room," places for receiving visitors, grooming, cleaning corn, or enjoying the twilight after a good day's work (see Figs. 10 and 11).

House Ritual

342 592 The building of a new house is an important social event

[TEXT CONTINUED ON PAGE 109]

8: Hunt E-4,5 (1958)1962 NV9 Tzeltal NV9
Amatenango
Aguacatenango

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Fig. 11.--House Viewed from the Street Gate